

Amendment Dated: 06 June 2008

IN THE CLAIMS:

RECEIVED  
CENTRAL FAX CENTER  
JUN 06 2008

Please amend claims 1- 22 as follows:

1. (Currently Amended) ~~Superconductive~~ A superconductive inductive component comprising: at least two terminals cooperating with a stack ~~(E)~~ of thin layers of alternately an electrically insulating material ~~(C2)~~ and a superconductive material ~~(C1)~~, and ~~comprising further including~~ tuning means ~~(M11, MA2)~~ producing a resistive connection between at least two of ~~thesaid~~ superconductive layers ~~(C1, C11)~~.

2. (Currently Amended) ~~Component~~ The component according to claim 1, characterized in that ~~thisaid~~ stack ~~(E)~~ is positioned on a superconductive track ~~(LS)~~.

3. (Currently Amended) ~~Component according to one of claims 1 or 2,~~ characterized in that The component according to claim 1, wherein a connection between two of said superconductive layers connected by the tuning means has more or less uniform resistance in ~~thesaid~~ stack.

4. (Currently Amended) ~~Component according to one of claims 1 or 2,~~ characterized in that The component according to claim 1, wherein a connection between two of said superconductive layers connected by the tuning means has a variable resistance within ~~thesaid~~ stack.

Amendment Dated: 06 June 2008

5. (Currently Amended) ~~Component according to one of the preceding claims, characterized in that~~ The component according to claim 1, wherein the tuning means (MA1, MA2) comprise at least one substance applied to all or part of the section of the said stack so as to produce a resistive connection between at least two superconductive layers.

6. (Currently Amended) ~~Component~~ The component according to claim 5, characterized in that the tuning means (MA1) have resistance characteristics which vary as a function of a physical or chemical variable, termed a control variable, specific to the environment of the component.

7. (Currently Amended) ~~Component according to one of claims 5 to 6, characterized in that~~ The component according to claim 5, wherein the tuning means (MA2) have a resistance controlled by an exposure or a variation of exposure to a light radiation (ME).

8. (Currently Amended) ~~Component according to one of claims 5 to 7, characterized in that~~ The component according to claim 5, wherein the tuning means (MA1) have a resistance controlled by a variation of temperature.

Amendment Dated: 06 June 2008

9. (Currently Amended) ~~Component according to one of claims 5 to 8, characterized in that~~ The component according to claim 5, wherein the tuning means (MA1) have a resistance controlled by an exposure or a variation of exposure to a magnetic field.

10. (Currently Amended) ~~Component according to one of claims 5 to 9, characterized in that~~ The component according to claim 5, wherein the tuning means (MA1) have a resistance controlled by an exposure or a variation of exposure to an electric field.

11. (Currently Amended) ~~Component according to one of claims 5 to 10, characterized in that~~ The component according to claim 5, wherein the tuning means (MA1, MA2) comprise a compound constituted by a polymer including metal particles.

12. (Currently Amended) ~~Component according to one of the preceding claims, characterized in that~~ The component according to claim 1, wherein the tuning means comprise means for controlling the resistance of at least one connection between two superconductive layers (C1, C1') connected by ~~these said~~ tuning means.

13. (Currently Amended) ~~Component~~ The component according to claim 12, characterized in that the control means include an electric or electronic circuit

Amendment Dated: 06 June 2008

(CXi, CR) for controlling the electrical resistivity or resistance between at least two superconductive layers connected by the tuning device.

14. (Currently Amended) ~~Electronic~~ An electronic device including a superconductive inductive component comprising at least two terminals cooperating with a stack of thin layers of alternately an electrically insulating material and a superconductive material, and ~~comprising~~ further includes tuning means producing a resistive connection between at least two of these said superconductive layers.

15. (Currently Amended) ~~Device~~ The device according to claim 14, further configured for providing an optoelectronic transducer function.

16. (Currently Amended) ~~Device according to claim 14,~~ characterized in that it also comprises The device according to claim 14, further including a capacitive component and ~~provides~~ providing a delay line function.

17. (Currently Amended) ~~Device according to one of claims 14 to 16, characterized in that it~~ The device according to claim 14, wherein said device produces at least one antenna including an inductive superconductive component.

18. (Currently Amended) ~~Device according to one of claims 16 or 17,~~ The device according to claim 16, being implemented in a phase shift radar device comprising a plurality of antennae each comprising an electronic circuit including at least

Amendment Dated: 06 June 2008

one delay line, ~~this said~~ delay line being arranged such that each of said antennae transmits or receives a signal the phase of which is shifted relative to that of the neighbouring antennae.

19. (Currently Amended) ~~Device according to one of claims 17 or 18,~~ The device according to claim 17. being implemented in a medical imaging device comprising at least one antenna including a superconductive inductive component the tuning means of which enable said antenna to be tuned.

20. (Currently Amended) ~~Method~~ A method for the production of a superconductive inductive component with a determined inductance value, ~~characterized in that it comprises~~ comprising: a phase of depositing a stack of alternately superconductive and insulating thin layers on a substrate, followed by a phase of depositing on all or part of the section of ~~this the~~ stack at least one tuning layer with a material which produces between a plurality of ~~these said~~ superconductive layers an electrical connection with a determined resistance, selected according to said inductance value.

21. (Currently Amended) ~~Method~~ A method for the production of a superconductive inductive component having controllable inductance characteristics, ~~characterized in that it comprises~~ comprising: a phase of depositing a stack of alternately superconductive and insulating thin layers on a substrate, followed by a phase of depositing on all or part of the section of ~~this the~~ stack at least one tuning layer, producing between a

Amendment Dated: 06 June 2008

between a plurality of ~~these~~said superconductive layers an electrical connection with a resistance varying as a function of a physical or chemical variable of the environment of ~~this~~said tuning layer.

22. (Currently Amended) ~~Method A~~ A method according to ~~one of~~ claims 20 or 21, characterized in that, claim 20, wherein after the phase of depositing a stack, the component has a so-called intermediate inductance value, and ~~in that~~ the phase of depositing the tuning layer enables a reduction of the inductance of the component relative to its intermediate inductance.